

To: Bill Simon[wsimon@frontier.net]
Cc: Wall, Dan[wall.dan@epa.gov]; Peter Butler[butlerpeter2@gmail.com]; Jim White - DNR[j.white@state.co.us]; Barb Horn - DNR[barb.horn@state.co.us]; Chuck Wanner[cwanner@frontier.net]; Steve Fearn[fearneng@rmi.net]; Julie Butler
From: Scott Roberts
Sent: Tue 8/11/2015 6:51:01 PM
Subject: Re: Fish v.2

Personal Email/Ex. 6

Hi all,

I can share that I informally checked on the benthic macroinvertebrates at Rotary Park in Durango this morning. Anecdotally, I can say that it looks like dominant taxa (Baetis, Hydropsychid, Simulid, and Brachycentrid) are alive at 100+ hours since the sediment plume arrived in Durango. This morning I even found a live Pteronarcys stonefly. From my three years of sampling the Animas River, I rarely find Pteronarcys. They are probably the most sensitive (to pollution) BMI species in the Durango stretch of the Animas River. However, I think we'll have to wait for results of long term BMI monitoring to appropriately assess the impact of this event on the BMI community.

Thanks,
Scott Roberts
Mountain Studies Institute
865-382-2993
scott@mountainstudies.org

On Tue, Aug 11, 2015 at 10:17 AM, <wsimon@frontier.net> wrote:

Jim or Barb, would it be possible to capture some of those small fish that Ed Zink and Dan have seen and i.d. them to species? Bill

From: Wall, Dan [mailto:wall.dan@epa.gov]
Sent: Tuesday, August 11, 2015 9:20 AM
To: wsimon@frontier.net; butlerpeter2@gmail.com; 'Jim White - DNR'; 'Barb Horn - DNR'; 'Scott Roberts'; 'Chuck Wanner'; 'Steve Fearn'; 'Julie Butler'
Subject: RE: Fish v.2

My suspicion is that the massive amount of iron hydroxide has globbed up a lot of the more toxic metals. Not bioavailable. I also think the native fish adapted as you say.

Barb were the caged fish exposed in the hatchery to unfiltered animas water prior to being put in the cages? I

From: wsimon@frontier.net [<mailto:wsimon@frontier.net>]
Sent: Tuesday, August 11, 2015 7:40 AM
To: Wall, Dan; butlerpeter2@gmail.com; 'Jim White - DNR'; 'Barb Horn - DNR'; 'Scott Roberts'; 'Chuck Wanner'; 'Steve Fearn'; 'Julie Butler'
Subject: RE: Fish v.2

That is great news Dan. Makes one wonder how that is happening given the degree of contamination. I also wonder exactly what species those little fellows are. It is possible that our native species have adapted somewhat to short but high concentrations of heavy metals whereas non-natives have not. Any chance of finding out?

Cheers,

Bill

From: Wall, Dan [<mailto:wall.dan@epa.gov>]
Sent: Tuesday, August 11, 2015 7:31 AM
To: butlerpeter2@gmail.com; Jim White - DNR; Barb Horn - DNR; Scott Roberts; William Simon; Chuck Wanner; Steve Fearn; Julie Butler
Subject: RE: Fish v.2

I saw exactly the same thing yesterday in a orange sediment covered pool Bruce Knowltons property. Maybe 1000 YoY fry.

From: butlerpeter2@gmail.com [<mailto:butlerpeter2@gmail.com>]
Sent: Monday, August 10, 2015 10:33 PM
To: Wall, Dan; Jim White - DNR; Barb Horn - DNR; Scott Roberts; William Simon; Chuck Wanner; Steve Fearn; Julie Butler
Subject: Fwd: Fish v.2

Fish at Zink Ranch near Trimble Lane.

Peter

Sent from my iPad

Begin forwarded message:

From: "Ed Zink" <edzink@waterfallranch.com>
Date: August 10, 2015 at 10:03:47 PM MDT
To: "Joe Wheeling" <jjwheeling@ekiva.net>, "Joe Bishop" <jbishop@bishdevco.com>, "John Glover" <john@mountainbikespecialists.com>, "D. Adam Smith" <smith@lpcattorney.org>, "Jim White" <j.white@state.co.us>, "Joanne Spina" <SPINAJM@co.laplata.co.us>, "Kelly Palmer" <kapalmer@fs.fed.us>, "Patricia Dorsey" <patt.dorsey@state.co.us>, "Peggy Montano" <pmontano@troutlaw.com>, "Robert B. Genualdi" <robert.genualdi@state.co.us>, "Ron LeBlanc" <LeBlancRP@ci.durango.co.us>, <deanbrookie@dgogov.org>
Cc: "Barry Owen" <barryowen@bresnan.net>, "Bob Wolff" <Personal Email/Ex. 6>, "Shana Zink" <s.zink@live.com>, "Bruce Whitehead" <brucew@southwesternwater.org>, "Butch Knowlton" <knowltonbk@co.laplata.co.us>, "Cap Allen" <capallen@frontier.net>, "Cathy Metz" <METZCL@ci.durango.co.us>, "Cecilia Whitaker" <cwhitakerpls@gmail.com>, "Cory Sue Hutchinson" <aquahab@bresnan.net>, "White, Dick" <dickwhite@ci.durango.co.us>, "Elizabeth Ballantine" <elizballantine@yahoo.com>, "Ellen Roberts" <eroberts@gobrainstorm.net>, "Janet Wolf" <wolf@ecosphere-services.com>, "Jerry & Karen Zink" <Personal Email/Ex. 6>, "Jim Bryce" <Personal Email/Ex. 6>, "Marsha Porter-Norton" <mporternorton@gmail.com>, "Marty Moses" <martin.moses@co.usda.gov>, "Matt Janowiak" <mjjanowiak@fs.fed.us>, "Mike Taylor" <mike.taylor@specialized.com>, "Nelson Zink" <zink@newmex.com>, "Shane Sigle, P.E." <shane@riverwise.org>, "Pete Foster" <pfooster@wrightwater.com>, "Peter Butler" <butlerpeter2@gmail.com>, "Richard Ballantine" <rgb@durangoherald.com>, "Tony Ganzerla" <oyaea@yahoo.com>, "Patti Zink" <pattizink@waterfallranch.com>, "Brett Schaffer" <brett@daltonranch.com>, "Dan James" <cheese@jamesranch.net>, "Ed Zink" <edzink@waterfallranch.com>, "Eric Bikis" <eric@bikiswater.com>, "Jud Hassel" <jrgh53@live.com>, "Meme Eberspacher" <meme@animasconsolidatedditch.com>, "Nancy Agro" <agro@mydurango.net>, "Tim Holt" <tim.united@outlook.com>, <annsoliver@gmail.com>, "Frank Sinton" <fjs@daltonranch.com>, "Ott, John" <manager@animaswatercompany.com>, "Terra Anderson" <Personal Email/Ex. 6>
Subject: FW: Fish v.2

August 10, 2015,

All,

Personal Matters/Ex. 6

downstream from a highly mineralized zone we likely live in an eco-zone which has probably somewhat adapted to the acidic nature of the water flowing in the Animas River for millions of years. While this latest incident is certainly a greatly more concentrated flow than we normally experience, it is not altogether out of the realm of past occurrences.

For over 60 years I have closely observed nearly $\frac{3}{4}$ mile of Animas River running along the east side of our Waterfall Ranch. Embedded are photos we took this evening (August 10, 2015) of baby fish, most likely suckers, that are along the bank of the river by the hundreds. This is encouraging to us. If these small, young, susceptible fish survived the recent episode, it might be that Mother Nature is be taking better care of herself than we first thought possible.

We are certainly looking forward to receiving good scientific analysis of both the concentration and duration of the extremely concentrated flow. This will be invaluable in developing both short term and long term plans to make the best of the bad situation that now exists.

Best Regards,

Ed Zink

From: Tom Hah

Personal Email/Ex. 6

Sent: Monday, August 10, 2015 9:02 PM

To: Ed Zink

Subject: Fish v.2

This email has been checked for viruses by Avast antivirus software.
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